

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

IN THE CLAIMS:

The claims read as follows.

1. (Currently Amended) An injection catheter for direct injection into a body tissue comprising:
 - an injection tube having a first channel, a second channel and a piercing tip, the first and second channels in fluid communication with a pressure source; and
 - a pressure apron,
 - the injection tube slidably placed in the pressure apron and moveable from a first position to a second position,
 - the pressure apron having a tissue-mating surface,
 - the piercing tip extending beyond the tissue-mating surface in the second position,
 - the first and second channels in fluid communication with a plug forming material.
2. (Canceled).
3. (Original) The injection catheter of claim 1, further comprising:
 - a catheter wall surrounding the injection tube and coupled to the pressure apron.
4. (Original) The injection catheter of claim 1, wherein the pressure apron includes an adhesive on at least a portion of one of its surfaces.
5. (Original) The injection catheter of claim 1, wherein the pressure apron is in the form of a truncated cone.
6. (Original) The injection catheter of claim 1, wherein the pressure apron includes a biocompatible polymeric material selected from silicones, nylons, urethanes, polyamides, polyimides, elastomers, or combinations thereof.
7. (Currently Amended) The injection catheter of claim 1, further comprising:
 - ~~a second injection tube~~ a catheter wall slidably placed in the pressure apron.
8. (Currently Amended) An injection device for direct injection into a body tissue comprising:

a catheter with a lumen and a catheter piercing tip;
a pressure apron coupled to the catheter and surrounding the lumen; and,
an injection tube having an injection tube piercing tip retractably positioned
within the lumen and extendable from the pressure apron,
the pressure apron having a tissue-mating surface adaptable to sealably engage
a target tissue,
the injection tube~~piercing tip~~ having at least a first channel, the first channel in
fluid communication with a plug forming material.

9. (Currently Amended) The injection device of claim 8, wherein the injection tube
~~piercing tip~~ has a ~~first channel~~ and a second channel, the first and second channels in
fluid communication with a pressure source.
10. (Canceled).
11. (Canceled).
12. (Original) The injection device of claim 8, wherein the pressure apron has an adhesive
on one of its surface.
13. (Original) The injection device of claim 12, wherein the adhesive is selected from
polysaccharides, cellulose, hydrogels, aliginate, or combinations thereof.
14. (Original) The injection device of claim 8 wherein the target tissue is the myocardium.
15. (Currently Amended) A medical kit ~~for delivering a therapeutic material~~ comprising:
a plug forming material;
a catheter having a channel[[,]] and a injection tube including an injection tube
piercing tip,
the injection tube ~~piercing tip~~ in fluid communication with a pressure source,
the injection tube ~~piercing tip~~ slidably placed in the channel and, ~~the channel~~
in fluid communication with a ~~the~~ plug forming material; and
a pressure apron slidably coupled to the catheter and having a tissue-mating
surface source; and
~~a therapeutic material.~~

16. (Currently Amended) The kit of claim 15, wherein the injection tube ~~piercing tip~~ has a first lumen and a second lumen, the first lumen and the second lumen slidable relative to one another.
17. (Original) The kit of claim 15, wherein the pressure apron sealably engages the catheter.
18. (Original) The kit of claim 15, wherein the pressure apron includes an adhesive on a least a portion of one of its surfaces.
19. (Original) The kit of claim 15, wherein the pressure apron is in the form of a truncated cone.
20. (Original) The kit of claim 15, wherein the pressure apron includes a biocompatible polymeric material selected from silicones, nylons, urethanes, polyamides, polyimides, elastomers, polyetherblockamide or combinations thereof.
21. (Currently Amended) A system for preventing leakage of material from a body tissue during the injection of a therapeutic plug forming material comprising:
 - a catheter with a lumen and a pressure apron surrounding the lumen, the pressure apron slidable on the catheter; and[[,]]
 - an injection tube having an injection tube piercing tip retractably positioned within the lumen,
 - the pressure apron having a tissue-mating surface,
 - the piercing tip having at least one channel, the channel in fluid communication with the plug forming material.
22. (Currently Amended) The system of claim 21 wherein the at least one channel is a plurality of channels ~~piercing tip has a plurality of channels~~, the plurality of channels in fluid communication with a pressure source.
23. (Canceled).
24. (Original) The system of claim 21 wherein the pressure apron has an adhesive on at least a portion of one of its surfaces.
25. (Original) The system of claim 24 wherein the adhesive is selected from polysaccharides, cellulose, hydrogels, alginate, or combinations thereof.
26. (Canceled).

27. (Currently Amended) The injection catheter of claim [[2]]1, wherein the first channel is longitudinally-positioned substantially parallel to the second channel.